

REMARKS

This application has been carefully reviewed in light of the Office Action dated July 21, 2003. Claims 69-96 have been canceled. Claims 32-68 are now pending. Applicants respectfully request reconsideration of the above-referenced application in light of the amendments and following remarks.

Claims 32-61 and 64-68 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Narwankar. The rejection is respectfully traversed and reconsideration is requested.

The claimed invention relates to the method of forming a capacitor structure by annealing the top conducting layer. Annealing the top conducting layer results in a capacitor structure with reduced capacitor current leakage relative to conventionally formed structure (Applicants' specification, pg. 4, lines 18-20). As such, independent claim 32 recites a method of forming a capacitor comprising "forming a bottom conducting layer; forming a dielectric layer over the bottom conducting layer; forming a top conducting layer over the dielectric layer, wherein said top conducting layer forms a top electrode; and annealing the entire top electrode with an oxidizing gas anneal." (emphasis added).

Applicants respectfully submit that Narwankar does not disclose, teach or suggest the limitations recited in claim 32. Specifically, Narwankar fails to disclose, teach or suggest annealing the entire top electrode. There is no support in Narwankar, Col. 12, table 1, Col. 10, lines 15-40 or Col. 11, lines 4-50 (as cited in the Office Action, pg. 2) for annealing an entire top electrode.

Narwankar merely teaches forming a first upper metal layer 608 on the insulating layer 606 (Col. 10, lines 61-62). The "first upper metal layer 608 is then treated or annealed in an oxygen-containing environment, resulting in the upper oxygen-containing layer 610, as shown in FIG. 6e." (Col. 11, lines 4-6). Next, a "second upper metal layer 612 is then deposited onto the upper oxygen containing layer 610." (Col. 11,

lines 16-17) (emphasis added). Thus, Narwankar's entire top electrode is not annealed since the second metal layer 612 is not annealed.

In contrast, claim 32 recites, "annealing the entire top electrode with an oxidizing gas anneal." (emphasis added). Since Narwankar does not disclose, teach or suggest annealing the entire top electrode, Narwankar does not anticipate the present invention.

For at least the foregoing reasons, claim 32 is allowable over Narwankar. Claims 33-61 and 64-68 depend from claim 32 and are allowable along with claim 32.

Claims 62 and 63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Narwankar. The rejection is respectfully traversed and reconsideration is requested.

Claim 62 depends from claim 32 and claim 63 depends from claim 62. Thus, claims 62 and 63 recite, "annealing the entire top electrode with an oxidizing gas anneal," (emphasis added). As set forth above, Narwankar fails to teach or suggest this claim element. Thus, claims 62 and 63 are allowable for at least those reasons provided above with regard to claim 32 and on their own merits.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

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Respectfully submitted,

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